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SPRING PLANTING ISSUE

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MARCH 1943

A Brief Summary of Economic Conditions

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WITH spring planting time almost at hand, farmers throughout the Nation are preparing now for an all-out production offensive * * * Total agricultural production goals this year are nearly 5 percent higher than actual production in 1942, itself a record-breaking year * * * Farmers, as well as urban groups, are urged to produce ample garden stuff for home use, when conditions permit * * * Prices received by farmers for agricultural commodities averaged about 111 percent of parity in mid-February, a four-point drop from mid-January * * * Production supplies for this year's crops, including labor, machinery, seed, and fertilizer, are getting major attention from the Department of Agriculture, now proceeding to assure all supplies possible * * * Farmers last year turned in the greatest production in history, surpassing 1941 total production by 12 percent, at the same time increasing production in the crops most needed in the war. This wartime conversion now steps into a new and more complete phase, as plans for this year's production are formulated, emphasizing further the needs for agricultural products specially needed in the war.

THE SPRING OFFENSIVE

OUR NATIONAL 1943 farm production offensive is beginning to roll. After a winter of getting ready, the time for action has come. We are now at the start of the farmers' spring campaign against the Axis.

Planting time presents a special challenge this year. The planting done in the coming weeks will determine largely the volume and kinds of crops we grow for war use in 1943. All-out production of war crops is urgent. To produce too much of them is impossible, and of some we cannot possibly produce enough. Plantings of these crops, therefore, must break all previous records, if agriculture is to do its part to win the war.

In the world conflict now raging food and other agricultural supplies are weapons both of attack and defense, often just as important as airplanes or tanks or guns. This country is the leading food producer of the United Nations. We have gigantic production resources. We must use those resources now to provide essential supplies to our fighting men, our civilian war workers and their families, and our allies abroad.

To do the full job required this year, each farm will have to meet its own individual war production goals, and then raise as much additional food and fiber as is practical. A little extra production from each farm, above the limit of mere convenience, can do wonders. In total, an extra acre per farm planted in food crops now, or an extra acre shifted from a non-essential to an essential crop, will make a tremendous difference in this year's harvest. That difference will be needed for really effective war production.

LAST year our farmers set a new total production record. Bearing down hard on the products most needed, they doubled production of soybeans and peanuts in a single year. They produced 600 million dozen

more eggs than ever before, 20 million more hogs, more beef, more milk, more corn. Good weather helped, but that wasn't all. Farmers gave greatest emphasis to producing crops and livestock most needed to win the war. They chalked up new records at a time when a million and a half farm workers had gone into the armed services or war industries. Their accomplishments were amazing.

In the season now beginning, however, an even greater task is ahead. As the armies of freedom spread their attacks to new fronts, food production must not only be maintained, it must be increased to take care of the expanding needs. Back in November, the Department of Agriculture announced agricultural production goals for this year, based on prospective requirements. Those goals were huge, many of them well above last year's record production. Large as they were, however, we have increased them for some vital commodities, including soybeans, flax, potatoes, dry peas, dry beans, sweetpotatoes and grain sorghums.

To help farmers reach their war goals, many measures have been taken by the Government. Price supports are being maintained for all war crops, and in some cases further steps are proposed to help farmers meet added production costs. Here is the crop production the Nation is asking of farmers this year: A million and a half acres more soybeans than called for in the goals last fall; a half million acres more flax; 60 thousand acres more dry peas; a quarter million acres more sweetpotatoes; 2 million acres more grain sorghums; 100 thousand acres more Irish potatoes; and a half

million acres more dry edible beans. As originally announced, the peanut goal calls for nearly 2 million acres more than last year's total. Although the original figure was not raised, special payments are being proposed to encourage growers to plant more peanuts. In addition to other price supports announced earlier on a wide range of products, price supports have been announced for the four major canning crops—tomatoes, peas, sweet corn, and snap beans.

Also extremely important this year is the job of maintaining and increasing our feed supplies, and of keeping them in balance.

THE crop production job ahead is one that calls for toil and sacrifice. Farmers face many hardships and many difficulties in obtaining the production needed. Labor is short in many areas. Supplies of machinery are limited. Fertilizer supply is tight. Lack of trucks and tires and gasoline presents many problems. Long hours, hard work, and fretful care are in store for everyone on the farm front.

There is a brighter side to this picture, however. In the first place, we have a splendid corps of skilled farm people, willing to put forth their utmost efforts in this crisis. One of our main problems is to keep the key people in this group on the farms where they are needed more than anywhere else. Another is to assist capable farm families, now living on farms too small to make fullest use of their labor, to relocate on land where they can produce larger quantities of foods. Another is to find full time replacements for workers who have left the farms, to train these replacements for farm work, and to get them into farm jobs as quickly as possible. Still another is to transport migrant workers to the places where they are needed, and to enlist townspeople and school children and women workers for peak season labor needs. All these needs are now fully realized.

In the second place, we have gigan-

tic stores of food grains in the Ever Normal Granary, and great reserves of fertility are stored in our soil—the results of far-sighted programs carried on during the last decade.

WE HAVE a well-rounded national farm program, streamlined for war, ready to serve needs as they arise. The war production obtained last year would not have been possible without it. Among other features, this program now includes definite provisions for supporting the prices of farm products until well after the war's end, thus safeguarding farmers against sudden post-war declines. These price supports, coupled with the Triple-A payments, the commodity loans program and the broadened program of production credit, should help materially to put farmers into position financially for full production.

Of course financial difficulties are not the only problems to be dealt with. With farm manpower being reduced by war, we need additional machinery to reach our maximum production. Recently the War Production Board increased the amount of steel available for making farm machinery this year, bringing the total considerably nearer to the figure I had originally requested. Even so, we shall not be able to get all the machinery needed, and may not even get enough for replacements. Metals of all kinds are so much in demand for all war production that the supply simply won't go around. We shall have a good supply of repair parts, however, and we shall have to do the job as best we can with the supplies available.

We are fortunate also in the fact that the people of the Nation as a whole are now awake to the size of our food needs, and to the serious nature of the problems confronting us. As new problems arise and as present ones begin to require more attention, the awakened public concern at our production difficulties will prove a valuable asset.

CLAUDE R. WICKARD,
Secretary of Agriculture.

Commodity Reviews

GOALS Farmers at the beginning of this crop year face the biggest and toughest assignment in history. Assuming normal yields, acreage goals for farm commodities this year call for a 4 percent increase over 1942 in crop production. Livestock goals for 1943 are 12 percent above 1942 production. Size of the task ahead is shown by the fact that last year's production was 12 percent higher than in 1941, which year itself was a record-breaker in many crops. Further heightening the difficulties of the job will be the wartime reduction in skilled agricultural labor supply, and difficulties in obtaining new machinery.

Farmers generally are fully aware of the urgent need for full-blast production this year, to supply the requirements of the armed forces, people on the home front, and the Nation's allies abroad. Difficult as the achievement of the necessary production may be, therefore, farmers of this country are determined to do the job.

FOOD Although the per capita supply of food for civilians will be less this year than last, it will probably be close to the 1935-39 average. With low income groups earning more money than usual, and important foods rationed, a larger part of the people may be well fed in 1943 than in the past. Assuming average yields in major crops and continued gain in livestock production, total agricultural production this year will exceed that of 1942. The increasing requirements of food for military and lend-lease uses, attendant upon expansion in the theaters of war, accounts for the expected shrinkage in civilian supplies. By careful use of available supplies, and by rationing of scarce commodities, it is believed enough food will be available on the average for a reasonably adequate civilian diet.

Last year, more than 12 percent of

the food produced in this country for human consumption went into military and lend-lease uses. These demands were and continue to be heavy for the protective foods, especially for meat, milk, and eggs, which can be concentrated and shipped easily. In 1943, military and lend-lease requirements are expected to take 20 to 25 percent of the beef produced here; of the pork, 35 to 40 percent; eggs, 25 to 30 percent; butter, 15 to 20 percent; cheese, 40 to 45 percent; condensed and evaporated milk, 40 to 50 percent; lard, 25 to 30 percent; other edible fats and oils, 20 to 25 percent; canned fruits, 50 to 60 percent; wheat, 10 to 15 percent; and rice, 15 to 20 percent. In all, these requirements probably will account for about one-fourth of the Nation's total production of food for human use. At the same time, civilian demand for food is unusually large because of increased domestic employment, increased earnings, and inability of consumers to spend money for many durable goods items that are no longer for sale.

Even with increased production, the total of civilian, military and lend-lease requirements result in over-all shortages in some foods. Transportation difficulties, price ceiling differentials between areas, and abnormal concentration of people in defense areas have contributed to shortages in certain localities. Shortages led to rationing of sugar and coffee last year, to rationing of processed fruits and vegetables beginning last month, and to the necessity for rationing meats, canned fish and fats and oils, which will be undertaken March 29, according to recent announcement.

DAIRY PRODUCTS With 30 percent of current butter production set aside for Government use, supplies for civilian consumption in March were considerably smaller than in January. Civilian supplies may increase slightly in later months.

however, as butter production increases seasonally. Because commercial stocks of cheese are relatively large, the order setting aside 50 percent of the Cheddar cheese for Government use, which became effective February 15, has had little effect on civilian cheese consumption. Rationing of cheese also is to begin March 29. Supplies of most manufactured dairy products other than butter, which are available for civilian consumption in the second and succeeding quarters, will be less than in the current quarter. Consumption of fluid milk is expected to continue at a relatively high level.

Measures initiated recently by the Department to increase production of corn and barley this year, and to increase the supply of high protein feeds for immediate feeding, will help farmers to meet the 122 billion pound goal for milk production in 1943. Prices of the principal manufactured dairy products under price ceilings, which will be supported through June 1944, will average considerably higher in 1943 than in 1942, especially during the summer when prices normally decline.

FATS AND OILS Production goals for soybeans and flaxseed were raised in January to help meet growing needs for fats and oils and high-protein foodstuffs. The new goal for soybeans, 12 million acres harvested for beans, is 1.5 million acres higher than the goal announced last November. The revised flaxseed goal, 5.5 million acres planted, is up half a million acres. Other goals for oilcrops remain unchanged at 5.5 million acres of peanuts picked and threshed and 22.5 million acres of cotton planted. With normal yields, these acreages would produce about 4.1 billion pounds of vegetable oil compared with an anticipated production of about 3.7 billion pounds on the 1942-43 season. Some additional supplies of vegetable oil may be obtained from corn grinding operations, olive pressings, and the

crushings of tung nuts and other vegetable oilseeds.

Incentive payments to farmers who plant in excess of 90 percent of their 1943 farm goals for soybeans, peanuts, and flaxseed were recommended by the Department. For each acre above 90 percent, but not in excess of 110 percent of the individual farm goal, farmers would receive a payment of \$15 for soybeans, \$30 for peanuts, and \$10 for flaxseed. Reflecting sharply smaller receipts of flaxseed in terminal markets, prices of linseed oil and flaxseed continued to rise in January and February. Prices of other fats and oils remain unchanged at ceiling levels.

MEAT ANIMALS Meat slaughter under Federal inspection in 1942 totaled nearly 15.5 billion pounds, compared to the previous record of 13.4 billion pounds in 1941. Total dressed weight of meat animals slaughtered under Federal inspection in 1942 was 15 percent above 1941 and 32 percent larger than the 1937-41 average. Hog slaughter accounted for most of the increase but slaughter of all classes of meat animals (hogs, cattle, and sheep) was at record levels. The large production of pork reflected the larger production per hog as well as the large number slaughtered. Although the average weight of inspected hogsslaughtered was more than 4 pounds above the previous record in 1941, lard production per animal was slightly smaller. The average live weight of inspected cattle slaughtered was 954 pounds, 7 pounds lighter than in 1941 but heavier than in any other year since 1933. Final estimates for total meat production in 1942 are not yet available but it probably was about 22 billion pounds. This compares with 19.5 billion in 1941 and the 1943 goal of 25.7 billion.

POULTRY AND EGGS Farmers on February 1 indicated intentions to buy 16 percent more chicks this spring than the record number purchased in 1942. Because a very favorable egg-feed price ratio is in

prospect for the spring, these intentions probably will be carried out or surpassed. Current demand for baby chicks for specialized production of broilers and fryers also is at a record level, with many hatcheries booked to capacity. Net withdrawals of poultry from storage have been very heavy, and holdings of poultry in cold storage on March 1 were 43 percent below those of a year earlier.

Egg production in 1943 will be much larger than the record output of 1942. Laying flocks are 15 percent larger than last year, and have proportionately more pullets. Egg prices probably will be slightly more favorable than last year, relative to prices of hogs and butterfat. After the seasonal decline from November to mid-February, egg prices have increased and now average 25 to 30 percent higher than a year ago. Permanent ceilings for eggs, which went into effect on March 6, will allow farmers to receive at prices at least 3 cents above the support levels. Quantities of eggs used for drying, storing, and hatching are increasing, and demand for civilian consumption will continue strong.

FEED Record disappearance of feed grains during the 1942-43 season will leave a corn carryover at end of the marketing year of about the same size as at the beginning. The carryover of oats and barley will be somewhat smaller. With livestock numbers increasing, the 1943-44 supply of feed grains per grain consuming animal unit may be 10 to 15 percent less than this season. Number of grain consuming animal units on farms increased about 11 percent in the year up to January 1, 1943.

To encourage larger production of feed to meet increasing requirements, farmers are now permitted to overplant their corn allotments without penalty, provided they have planted up to their goals in war crops. Grain sorghums, hay, and pastures have been placed on the list of war crops, to encourage feed production.

The quantity of 1942 corn sealed by

farmers up to February 20, 1943, totaled about 48 million bushels—37 million less than at that date in 1942. This decrease reflects the fact that corn prices this year are higher in relation to the loan rate than in 1941-42. On January 15, the price of corn averaged higher than the loan rate in all Corn Belt States except South Dakota. Quantity of corn sealed in the rest of marketing year may be small.

The last of the 125 millions of wheat designated by Congress to be sold for feed in the 1942-43 marketing year was sold out during February. Secretary Claude R. Wickard has asked that the Commodity Credit Corporation be allowed to sell an additional 100 million bushels of wheat for feed in the rest of the period.

TRUCK CROPS A reduction of 11 percent is expected in the commercial vegetable crop of this spring, compared with that of 1942. Supplies of important fresh vegetables will be relatively short during March and April. Frosts in January, February and early March caused considerable damage. Frost damage was severe for peas, snap beans, cabbage, lima beans, eggplant, tomatoes and peppers. In an effort to encourage greater production of essential fresh vegetables, the Department is offering a production payment of \$50 per acre for each acre of approved truck crops, in excess of 90 percent of the individual farmer's truck crop goal, up to 110 percent of that goal. The Department also has announced price supports to growers of the four major canning crops—tomatoes, peas, sweet corn, and snap beans. Guaranteed prices will range on the average from 20 percent to 35 percent above last year. The Government will purchase the output of certified processors at prices high enough to permit canners to pay growers the specified minimum prices.

COTTON Grade and staple premiums and discounts under the 1943 cotton loan program, announced well in advance of the

planting season, will help cotton farmers in making definite plans for 1943 operations. To encourage production of long staple cotton, rather than the shorter staples, premiums on the higher grades of long staple cotton are at the same level as in 1942. Where practicable, all cotton farmers are urged to shift to longer staple varieties than they have raised before. The 1943 quality differentials bear a much closer relationship to current market quotations than in 1942. Especially is this true of discounts upon the lower grades. Other significant changes for 1943 are the elimination of differences in the premiums and discounts between rain-grown and irrigated cotton, and the widening of the differential between middling $\frac{3}{8}$ inch and middling $\frac{1}{2}$ inch cotton, from 20 points under the 1942 loan to 85 points under the 1943 loan. In effect, the widening of the differential between the two staples will raise the loan rate

on all cotton with staple longer than $\frac{3}{8}$ inch.

Index Numbers of Prices Received and Paid by Farmers

[1910-14=100]

Year and month	Prices received	Prices paid, interest and taxes	Buying power of farm products ¹
1942			
January.....	149	146	102
February.....	145	147	99
March.....	146	150	97
April.....	150	151	99
May.....	152	152	100
June.....	151	152	99
July.....	154	152	101
August.....	163	152	107
September.....	163	153	107
October.....	169	154	110
November.....	169	155	109
December.....	178	156	114
1943			
January.....	182	158	115
February.....	178	160	111

¹ Ratio of prices received to prices paid, interest and taxes.

Prices of Farm Products

[Estimates of average prices received by farmers at local farm markets based on reports to the Bureau of Agricultural Economics. Average of reports covering the United States weighted according to relative importance of district and State]

	5-year average, August 1909-July 1914	February average, 1910-14	February 1942	January 1943	February 1943	Parity price, February 1943
Wheat (bushel).....cents..	88.4	89.2	104.9	117.5	119.5	141.4
Corn (bushel).....do.....	64.2	60.1	76.6	88.0	90.4	102.7
Oats (bushel).....do.....	39.9	39.8	52.0	52.5	55.5	63.8
Rice (bushel).....do.....	81.3	-----	¹ 161.4	174.2	174.7	130.1
Cotton (pound).....do.....	12.4	12.3	17.80	19.74	19.68	19.84
Potatoes (bushel).....do.....	69.7	66.3	104.5	117.8	125.7	114.9
Hay (ton).....dollars..	11.87	12.02	10.76	11.20	11.94	18.99
Soybeans (bushel).....do.....	-----	-----	1.78	1.59	1.60	1.54
Peanuts (pound).....cents..	4.80	4.9	5.44	6.23	6.45	7.68
Peanuts for oil (pound).....do.....	-----	-----	4.08	3.97	4.03	3.76
Apples (bushel).....dollars..	.96	1.06	1.20	1.60	1.71	1.54
Hogs (hundredweight).....do.....	7.27	¹ 7.16	11.85	14.07	14.63	11.63
Beef cattle (hundredweight).....do.....	5.42	¹ 5.31	¹ 9.89	11.78	12.36	8.67
Veal calves (hundredweight).....do.....	6.75	¹ 6.72	¹ 11.85	13.60	14.18	10.80
Lambs (hundredweight).....do.....	5.88	¹ 5.96	10.60	13.04	13.77	9.41
Butterfat (pound).....cents..	26.3	27.4	36.2	49.6	50.0	² 43.2
Milk, wholesale (100 pound).....dollars..	1.60	1.77	¹ 2.58	¹ 3.06	² 3.06	² 2.63
Chickens (pound).....cents..	11.4	11.1	17.4	22.1	22.8	18.2
Eggs (dozen).....do.....	21.5	23.7	27.5	39.0	34.2	² 30.3
Wool (pound).....do.....	18.3	18.5	37.1	39.5	39.8	29.3
Tobacco:						
Fire-cured-types 21-24 (pound).....do.....	² 13.6	-----	13.3	16.4	17.0	13.7
Air-cured (dark) type 35-36 (pound).....do.....	² 22.9	-----	10.3	15.6	13.7	11.0

¹ Revised.

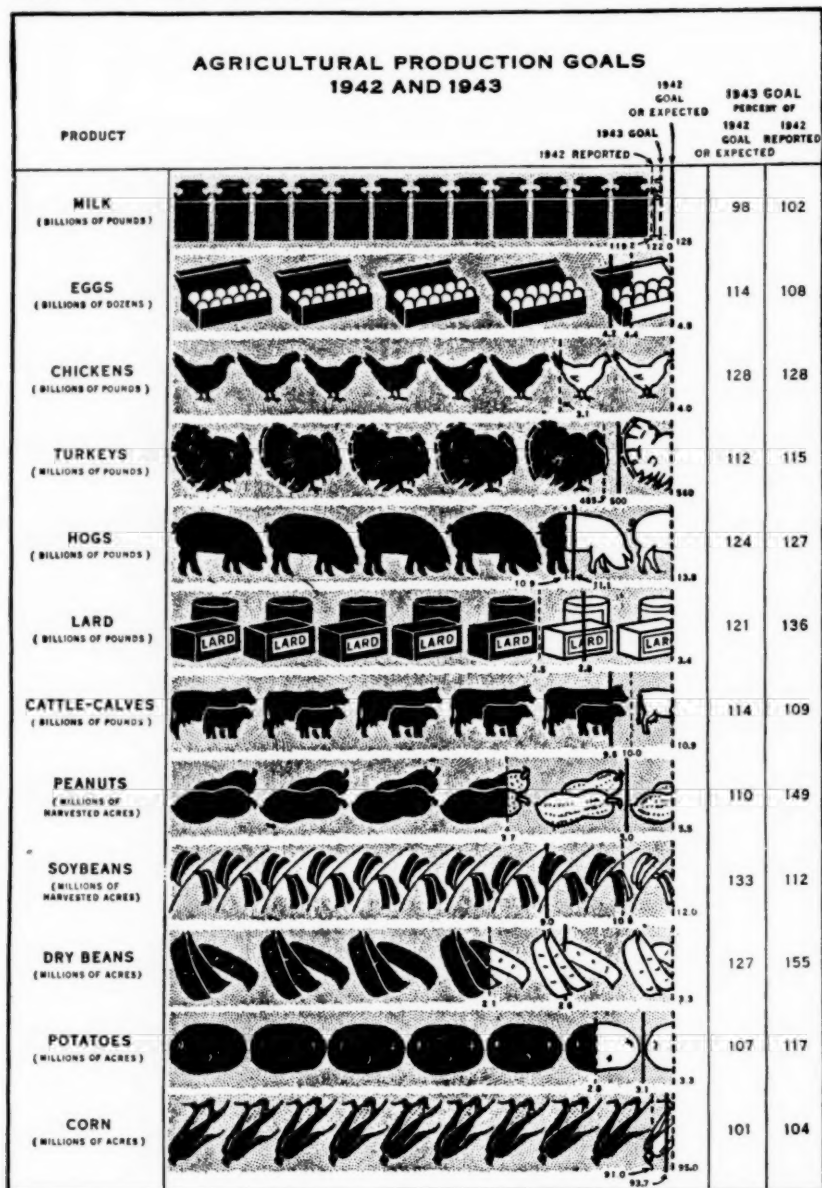
² Base price crop years 1919-28.

³ Adjusted for seasonality.

⁴ Preliminary.

FRUITS Wholesale prices of all fruits in city markets have been ranging considerably above those of a year ago—in many cases as much as 50 percent above. Returns to growers also have greatly exceeded last season's. City auction prices of fresh citrus fruits advanced sharply to high levels in late December, then de-

clined in the first half of January to relatively low levels. From about mid-January, prices of fresh citrus increased steadily upward through the first week of February. On December 31 the Office of Price Administration announced ceiling prices for all fresh citrus.



MILLIONS OF VICTORY GARDENS

EVERY farm, wherever climate and water supplies permit, should have this year a Victory Garden large enough to produce the family's entire year's supply of vegetables, vegetables fresh from the garden or storage pit, vegetables canned, dried, salted or frozen, but vegetables in some form or other sufficient to provide three or four servings a day every day in the year. Above all, first choice should be made of green and leafy vegetables, yellow vegetables, tomatoes and more tomatoes, for these groups of vegetables are the richest in nutritive values. They are particularly rich in vitamins A and C and the minerals, lime and iron, so essential in maintaining health. Yes; 6 million farms at least need to have bigger and better gardens this year.

There is need also for 12 million or more town and suburban gardens as well as metropolitan community or allotment Victory gardens, gardens that will contribute a measurable supply of vegetables for nonfarm homemakers. Secretary of Agriculture Claude R. Wickard, national food administrator, in a recent press release called on every town, city, and suburban family with a sufficient plot of open, sunny, and fertile ground or access to a community or allotment type of garden to join in the 1943 Victory Garden program.

By growing a home vegetable garden, he said, any citizen can make a worthwhile contribution to the Nation's total food supply and thus help win the war.

"Victory gardens offer those on the home front a chance to get in the battle of food," Secretary Wickard said. "While farmers broke all previous records of food production in 1942 for the third consecutive year, needs are now practically unlimited. We need more food than ever before in history—we need it for our armed forces in action on world-wide fronts, for our men and women in training,

and for our fighting allies. We need it to keep those at home healthy and strong.

"We are asking farmers to produce even more food in 1943 than last year and they will do their level best to meet their goals. Every farm family will be expected, of course, to have a garden for its own use, and where possible, to send extra supplies of fresh vegetables to nearby markets.

"At the same time, the residents of towns, cities, and suburban areas who have suitable garden space available can make an important contribution toward supplying our total food needs by growing Victory gardens. The vegetables they produce will provide nutritious food for the family table, lessen the drain on commercial food stocks, and ease transportation burdens. Home-canned vegetables also will insure a reserve food supply for family use."

SO GREAT is the need of the military and naval forces and allies abroad that the Government will take one-half of the 1943 prospective commercial pack of vegetables. The transportation situation is such that the quantities of vegetables so freely shipped in the past from far-off points, will be greatly lessened. Producers near to consumption points will be strained to grow enough vegetables for canning plants and nearby markets. Retail costs of vegetables necessarily have risen. Also, numerous other factors affecting a nation at war may prevent many people from getting the amounts of these protective foods they should have. Of special concern is the resultant insufficient daily supply of vitamin C.

So every urban or suburban family with sufficient open, sunny space and fertile ground should have a Victory garden this year. Vacant real estate developments, vacant property surrounding industrial plants, vacant lots, ground on a railroad right of way,

undeveloped park spaces, property nearby to industrial housing communities, vacant property of any kind that is at all fertile and can be tilled, ought to be given over to Victory gardens. Some school grounds might well be turned into school farms to produce vegetables for school lunches.

Farms and suburban homesteads should no longer put off planting some fruit to meet the home needs. Small fruits, such as grapes, strawberries come into bearing soon and, with ordinary good care, reward the owner with highly desirable and healthful food. Strawberries seem especially desirable, for they are rich in vitamin C, and can be grown easily on any good moisture-holding garden soil. Nor should the planting of the kinds of tree fruits that do well in the community be delayed any longer.

GREEN and leafy vegetables, spinach, lettuce, kale, collards, broccoli, cabbage, snap and lima beans, peas, carrots, yellow turnips, yellow squash, yellow corn, and tomatoes must be the mainstay of every garden. All are rather easily grown, given half a chance. They can be planted so

that the garden yields something from early spring until the hard freezes of winter. And they supply the essential vitamins A and C and some minerals. Half a cupful of cooked greens will supply an adult with his daily vitamin A requirement. Three-fourths of a cupful of green cabbage will yield one-half of the day's vitamin C needs.

To be sure Victory gardeners will want to plant other things. On our farms, potatoes, sweetpotatoes, pumpkins, parsnips, celery, oyster plant, dry beans and peas, and herbs as well will be grown for home use. But the town gardener with restricted garden space must plant to get the most out of that space and the groups of vegetables named will do that.

The outline shown in the following table should serve Victory gardeners as a guide in planning their garden and home conservation needs. This outline is based on vegetables of the kinds emphasized above that may be needed for one person for the year. Multiply these amounts by the number of persons in the family, and it will be seen how large the garden should be and how much of the garden product should

Victory Gardens and the Home Food Supply

How Much to Eat—To Preserve—To Plant Yearly of Green, Leafy Vegetables, Tomatoes, Yellow Vegetables

Suggested servings per person yearly	Home-grown vegetables and fruits	Amount to store or preserve per person per year	How to preserve	Amount to plant per person (based on fair yields under favorable conditions)	
				Spring	Fall
180	Cabbage.....	40 pounds.....	Pit storage.....	18 plants.....	18 plants.....
90	Lettuce.....	10 pounds.....	Kraut.....	9 feet.....	16 feet.....
40	Spinach.....			15 feet.....	15 feet.....
10	Broccoli.....	6 pints.....	Canning.....	4 plants.....	4 plants.....
10	Kale.....			8 plants.....	8 plants.....
30	String beans.....	8 quarts.....	Canning, salting.....	60 feet.....	60 feet.....
30	Peas.....	4 pints.....	Canning.....	45 feet.....	45 feet.....
60	Yellow turnips.....	15 pounds.....	Pit storage.....	10 feet.....	15 feet.....
120	Carrots.....	30 pounds.....	Pit storage.....	15 feet.....	15 feet.....
10	Beet tops.....			5 feet.....	5 feet.....
60	Yellow corn.....	10 pints.....	Canned.....	100 feet.....	100 feet.....
30	Yellow squash.....	1 pound.....	Dried.....		
		10 pounds.....	Dry storage.....	1 plant.....	3 plants.....
300	Tomatoes.....	30 quarts.....	Canning.....	15 plants.....	15 plants.....
			Catsup.....		
			Chili sauce.....		

Adapted from table prepared by the Extension Service, College of Agriculture, University of Illinois.

be preserved or stored for use. The estimated production will yield 980 servings per person per year, something over 2½ servings per day. These will be supplemented, of course with purchased vegetables such as potatoes, dried beans, root crops and other things. If the garden is big enough, the Victory gardener will also want to grow some other kinds, but the kinds given here are those most needed.

VICTORY gardeners should be prepared, of course, the Secretary of Agriculture has said, "to take care of their gardens faithfully right through the spring and summer season and, where climate permits, right through fall and winter as well. We cannot afford to waste seed, fertilizer, insecticides and effort this year." This implies that the Victory gardener should plan his garden well and follow through so that the garden will produce something even after the first flush of spring and the easy growing days of early summer. Moreover, it means that the Victory gardener should look very carefully to his soil. In many backyards, the soil is not conducive to vegetable gardening because it is the soil that was taken out when the cellar was dug. That is always hard stuff to manage and bring into shape. By starting with fertile, easily worked soil, almost half the battle is won. The beginning Victory gardener should also avail himself of the very great amount of information on gardening which is available. The Department Circular 483 "Victory Gardens" will be most helpful. Circulars from the State Extension Service of the various State Agricultural Colleges, likewise, may be obtained freely. Moreover, in every locality there are gardeners of experience who will help the new gardener to judge quality of the soil and find how to lay out and plant the garden. Much work and many disappointments will be avoided if the beginner will plan his garden and carry on his work in line with such counsel.

The program will be carried out on a national scale, with backyard and community gardens, farm gardens and school gardens everywhere, perhaps not blooming like roses, but yielding the utmost of much needed protective health maintaining vegetables.

H. W. HOCHBAUM, *Chairman,*
Victory Gardening Committee,
Department of Agriculture.

New Equipment Orders Issued

CHANGES have been made in the WPB order controlling the manufacture of farm machinery and equipment and repair parts which permit increased production of a number of items.

Among other measures, the changes: (1) Remove from restrictions of the order, beehives, farm gates, feed trucks, grit boxes, hog troughs, laying nests, milk stools, poultry waterers and feeders, and livestock feeders, where these items are made of non-critical materials; (2) permit manufacturers to make stanchions, stalls, and livestock pens from rerolled rail steel; (3) make it possible to include items of harness hardware used for replacement and repairs within the repairs quota. This means that harness hardware may be produced at about 120 percent of the quantity produced during the base period; (4) permit manufacturers of barnyard items such as feed, litter, and hay carriers, cattle stalls and stanchions, and fittings, who have not been assigned production quotas, to construct a limited amount of such equipment for repair and maintenance. They are permitted to segregate 30 percent of their base production of these items and add the value of such amount to their repair parts quota; (5) brings water-well casings of the type commonly manufactured from steel sheets and used in construction of water wells for irrigation or other farm purposes under the terms of the amended order, and sets a quota of 85 percent of the base rate for all manufacturers.

WAR SPEEDS STANDARDIZATION

WARTIME necessity has led to a marked expansion of the standardization, grading, and inspection work carried on by the Department of Agriculture. One of the big jobs has been the inspection of practically all canned goods for the Army, the assignment being carried out by Food Distribution Administration personnel at the request of the Quartermaster Corps. Also the increased amount of food purchasing by the Federal Government as a result of the expansion of the armed forces, and the buying of food for the Lend-Lease programs which were inaugurated in the spring of 1941, has accelerated all standardization, grading, and inspection work.

Speed is essential in wartime. The previous work done by the United States Department of Agriculture in standardization and in setting up an inspection force began to pay real dividends in saved time as the volume of Government purchases increased.

Because bids on food sales came from dealers all over the country, it was necessary to have a uniform basis for bidding. As a result of educational activities carried on over a number of years, a great many producers, dealers, and handlers were already familiar with the official standardized grades which had been promulgated. This knowledge on their part was both a time saver and a convenience when vendors were called upon to fill orders from the Government, as the great bulk of Government purchases was made on the basis of existing U. S. standards for grades. The established official standards provided a sound basis for buying the quality of products needed for specific purposes.

HERE are just a few figures on how the volume of inspection work has increased. The comparisons are for the fiscal years 1941 and 1942: Butter inspected increased from 278 million pounds to 325 million pounds; cheese

from 44 million pounds to 340 million pounds; dressed poultry from 77 million pounds to 118 million pounds; dry skim milk from 30 million to 185 million pounds; evaporated milk from 204 million to 1,631 million pounds.

These purchase programs made it necessary to inspect a large volume of products which either had not previously been inspected at all, or only in small quantities. In 1942, for example, lard inspections totalled more than 825 million pounds; canned meats 759 million pounds; cured pork, 463 million pounds; fat back, 100 million pounds.

Dried eggs are in big demand as a wartime food and the growth of the egg-drying industry finds a parallel in inspection work. In 1941 the volume of dried eggs inspected was about 1 million pounds. By the last year the volume was 139 million pounds.

A resident sampler is assigned to each of the egg-drying plants in operation. It is the job of the resident sampler to send a sample of each batch of eggs dried to a laboratory of the Food Distribution Administration at Chicago. Here the product is tested for fats, solubility, solids, acidity, color, and texture. On the basis of these tests the acceptability of the product for Government requirements is determined.

But egg drying isn't the only field in which it has been necessary to hire new inspectors. The number of meat graders in 1942 had more than trebled from the 1941 figure, and the same was true with processed foods. The number of Federal-State fresh fruit and vegetable inspectors also increased, and more than 1,000 names have been added to the list of licensees.

IN recent months an increasing number of women have been employed for inspection work in laboratories and some have been assigned to jobs in processing plants. In connection with the work in processed foods, for example,

the number of women has already increased from 2 to 105 and more are being hired.

Government procurement operations, although accounting for a large part of the impetus to grading, standardization, and inspection work are not the sole factor. Another motivating force is the need for measurements of quality as a factor in the determination of fair prices. This is important in connection with the wartime price control programs.

Under normal conditions the relationship between price and quality works itself out on the basis of supply and demand. The lower quality product tends to have a lower price while the higher quality product tends to command a higher price. Ceilings tend to disturb this relationship, particularly when demand increases and the supply remains constant or declines. Without close supervision over the determination of grades, there is a natural tendency for the interested individuals to up-grade some products. This up-grading may be the result either of ignorance or design, but in either case it causes the consumer to pay more than he should for the goods he buys.

The Office of Price Administration in administering the price control program, uses the standards for grades formulated by the Department of Agriculture in connection with the establishment of ceiling prices. To make these more useful for price control purposes, the Department of Agriculture has announced revisions and simplifications of some of its standards for grades. This has been true with poultry, eggs, and butter. Standard letter designations—AA, A, B, and C, have been substituted for the older name designations.

MANY of the grades of the Department of Agriculture already are familiar to consumers. This understanding of the relative merits of the various products sold on a graded basis make shopping easier. Probably the best known of the grades, as far as

consumers are concerned, are those for fresh meats and canned fruits and vegetables. As long ago as 1927 the Department stamped carcasses so that each retail cut would show the grade name. First beef, then veal, lamb, and mutton were graded and stamped for retail use. For a number of years many canners have been packing their products on a grade basis. The number of plants operating under continuous inspection—that is, observance of all stages of the canning operation by Federal inspectors—has been increasing steadily.

Expansion of standardization and grading brought about by the needs of war probably will continue in the post-war period, because of demand originating with producers, handlers, and consumers. Greatest future demand for extension of grading and grade labeling probably will come from consumers. During the current war emergency more and more consumers will become familiar with U. S. grades and, as housewives and shoppers get the habit of buying by grade, they may want the system continued and expanded.

Alongside the day-to-day operations of the grading and standardization program in the marketing of farm products, and the expansion brought about by war necessity, has been a continuing need for research. This research is designed to keep the work up to date—to see how the tentative standards are working out in practice—to find how existing grades are standing the daily test of marketing needs—to learn what revisions and refinements need to be made for the improvement of the programs.

As time goes on and other needs arise, continuing research may show the need for other amendments to the standards. These will be made when needed, for the final criterion of these Federal programs is usefulness in operation.

C. W. KITCHEN,
Deputy Director,
Food Distribution Administration.

MACHINERY, LTD.

TAKE a pinch of new farm machinery. Season abundantly with repair parts, add a subnormal amount of vital farm workers and mix. Uncle Sam's assignment in 1943 is to make the biggest batch of farmstuffs in history—with the above recipe.

M. Clifford Townsend, Director of the Food Production Administration, recently expressed confidence, that the job will be done, despite the difficulties. "Although the present allotment of equipment is limited," he said, "farmers are doing their level best." Their attitude is: "We will, if it's humanly possible."

Of necessity, about 75 percent of the Nation's record output of steel and other critical materials has been rolling directly to war. Because materials for farm machinery are limited, farm machines must be apportioned where they will bring the maximum food and fiber production for keeping our fighting men and civilians behind them going strong.

Wars are gluttons for steel. It takes 81 million pounds of rough stock steel to make a 35,000-ton battleship. The 3,538,000 pounds of rough stock steel which go into a destroyer are enough for the manufacture of more than 2,000 tractors. The steel going into a heavy tank is enough for about 200 plows.

Controlled distribution of farm machinery began last November 28. On that date, following a "freeze" of all new machinery, a permanent plan for rationing became effective. The plan was incorporated in Rationing Order C—later redesignated as Food Production Order 3. The program is being administered by the United States Department of Agriculture, which was delegated the authority for rationing by the War Production Board and Office of Price Administration.

Under WPB Limitation Order L-170, the Department originally was

allocated enough steel to make 23 percent of the 1940 output of new farm machinery, and 130 percent of the average annual net sales of repair parts during 1940 and 1941.

However, a recent allocation of steel for new machinery was authorized which will make possible the production of about 40 percent as much as was produced in 1940, and the quota of repair parts was raised substantially.

Rationing Order C decreed that about 75 types of machinery—mainly heavy machinery—would be sold only to persons having "purchase certificates." Two lists of items were included: Schedule I listed rationed items for which State and county quotas were set; and Schedule II listed implements which were not to be rationed, but upon which distribution directions were to be given. Under the order, manufacturers were instructed to maintain a 25 percent "holdback" to meet unforeseen emergencies.

A RECENT amendment to the rationing plan provides that a State USDA War Board can authorize farm machinery manufacturers, distributors and dealers within its State to work out quota exchanges with one another to expedite distribution. Previously, quotas to sell farm equipment were worked out at the manufacturers' level and War Boards had no power to authorize exchanges in State quotas. Where inequalities between county quotas exist, State War Boards now may rectify them.

In each agricultural county in the Nation, the County USDA War Board has appointed a County Farm Rationing Committee to issue farm machinery purchase certificates for the rationed equipment. The committees have their headquarters in County War Board offices and serve without pay. Three members and two alter-

nates, all of them local farmers, serve on each committee.

State quotas for each of the rationed items were set up and distributed among counties after consideration was given to the relationship of a county's ability to produce, and its need.

Although about 75 types of machinery are rationed, many types are not rationed and can be bought as usual. Dealers, however, will have fewer of these machines to sell than usual. Repair parts and attachments are not rationed.

If a farmer needs a new machine that is on the rationed list, he fills out an application form, obtainable from machinery dealers or County Farm Rationing Committees. On this application, the farmer explains why he needs the new equipment. For example, he may show that he is unable to repair an old machine or that he cannot get a used machine by buying, renting, or trading. He must agree that the machine he intends to replace will be used for the best interests of the Nation. For instance, he may indicate that he needs the old machine himself, or that he will turn it in for rebuilding or for use as scrap after the good parts have been salvaged.

The farmer must also agree that if he gets the new farm machinery it will be used to the maximum on important production. That may mean that he will need to rent it out on occasion, or do custom work with it, or let others use it, in addition to using it himself on his own farm.

AFTER the farmer has filled out an application, his county committee may wish to ask for still more information to help decide what action to take. In some cases, the committee may want to visit a farmer in order to determine the extent of his need for new equipment.

After considering all available facts, the committee makes its decision, either issuing a purchase certificate or

notifying the farmer that his application has been denied.

A purchase certificate authorizes the holder to purchase rationed machinery and equipment. One certificate is issued for each item to be purchased and is good for only 60 days unless renewed by the committee. If a farmer is not satisfied with a committee's decision, the rationing plan contains a provision for appeals.

Throughout the nation, County Farm Rationing Committees are serving as the backbone of this program. Although the program does not have the scope of some rationing programs, it is extremely important to agriculture.

RATIONING alone, however, is not enough to do the full job required. It must be augmented by other related programs. For example, the Department of Agriculture is continuing the machinery repair program which was instituted in 1942. Worn parts which might break down at a critical time during cultivation or harvest are replaced with new parts and the old ones channelled into the scrap pile to start anew the cycle of maintenance. Dealers are receiving repair part orders earlier than ever before. Farmers are attending schools conducted by Federal agencies in order to learn more about maintaining their equipment, repairing it and adjusting it for most effective operation.

The care phase of the machinery program is in full swing. The pre-season checking and overhauling of equipment, and frequent lubrication of important parts while in use, have been stressed. Bright parts which might be damaged by rust—plowshares for example—are being coated with grease or special compounds. Outside worn and weathered parts are given a once-over with the paint brush. Mower blades are greased and hung in machine sheds.

Department agencies are helping to promote projects for sharing of equipment between farmers. Through rings

and pools, machinery which might otherwise be idle part of the time is kept busy for additional periods. Sharing—an old American custom—is getting a real workout during these war days.

Together, rationing, repairing, caring, and sharing farm machinery will help farmers very materially in obtaining the largest possible production this year. These activities, of course,

are not substitutes for a plentiful supply of machines. They are methods of stretching our limited supply. Lack of plentiful machinery and manpower is one of the many sacrifices made necessary by war.

L. L. NEEDLER, *Chief,
Distribution of
Farm Supplies Branch,
Food Production Administration.*

FERTILIZER SUPPLIES

FERTILIZER is a war production tool—a means of increasing wartime production of agricultural supplies for civilians, the armed forces and our allies. As in the case of many other materials, the war itself, while boosting the fertilizer demand, has reduced the supply available.

Fertilizer supplies are governed by the situation of three plant food elements—nitrogen, phosphorus, and potash—which are used both as straight materials and as ingredients in mixed fertilizers. The nitrogen which farmers would use to grow crops must be shared with the armed forces for use in explosives. Nitrogen is used in considerable quantity as straight material and also in a very important plant food element in most mixed fertilizers.

Nitrogen for fertilizer includes both chemical or inorganic nitrogen and nitrogen of plant or animal origin. During recent years an increasing percent of the nitrogen has come from the inorganic sources. This has been due to an increased production of sulfate of ammonia, synthetic nitrate of soda, and anhydrous ammonia. On the other hand we have been using in some years a smaller tonnage of cottonseed meal, animal tankage and fish scrap, which are sources of organic nitrogen. Production of activated sewage sludge, another organic source, has increased. In addition to these sources, many other materials provide sources which contribute some nitrogen to the supply available for fertilizer.

Wartime demands for nitrogen have affected markedly the supply of nitrogenous fertilizer materials. All of the anhydrous ammonia produced, as well as a considerable part of the synthetic nitrogen, have been needed for manufacture of explosives and other instruments of war. As a result, during the last year sulfate of ammonia has provided almost the only reliable source for fertilizer nitrogen. The supply of organic nitrogen has been reduced by the use of larger quantities of protein feed for livestock, and by the decline in imports of tankage and castor pomace. Increased imports of Chilean nitrate, however, have helped to supply needed fertilizer materials.

The quantity of nitrogen consumed in commercial fertilizer is given below, by years, together with the percentage sold directly to farmers as materials.

Year	Tons of nitrogen	Percent sold as straight materials
1936.....	351,000	48
1937.....	411,000	48
1938.....	384,000	48
1939.....	390,000	47.5
1940.....	413,000	49
1941.....	456,000	51

In 1941, of the 451,000 tons of nitrogen used in fertilizer, about 52,000 tons were obtained from organic materials. As is customary, nearly one-half of the nitrogen was sold direct to farmers as straight materials and the other half

was consumed in mixed fertilizer in connection with phosphoric acid and potash.

CONSUMPTION of phosphate as fertilizer has increased in recent years, because of the increase in tonnage of mixed fertilizers and an increase in the use of phosphate as an ingredient in them. A large amount of phosphate fertilizer has been distributed in connection with the conservation program of the Agricultural Adjustment Agency. Plant capacity for production of ordinary superphosphate is considerably larger than the probable demands, although some tight situations can develop during the heavy late winter and early spring season unless adequate reserves are maintained. Production of triple superphosphate has been large. Only a limited quantity of this concentrated material is available for domestic use, however, because much of it is required for export. Its concentrated form permits large savings in use of vitally needed cargo shipping space.

The supply of potash, the third important plant food element used in fertilizer, has been affected by the war, but not as much as in World War I. In 1914 we were totally dependent on European sources of potash, whereas in 1939 we had a well developed potash industry in the United States and required only limited imports of potash to supply domestic agricultural needs. With the outbreak of war, potash production was immediately stepped up to take care of domestic needs, industrial as well as agricultural. However, agricultural needs for potash have been increasing in recent years as more soil building legumes have been included in cropping systems. In addition, when a set of approved grades of mixed fertilizer was established for each State for this year, the average plant food content of low analysis mixed fertilizer was increased, which called for larger use of potash.

AS AN outgrowth of these conditions a shortage in the potash

supply has developed for several individual fertilizer mixers. Some other sources of potash are being made available which will provide supplies about sufficient to take care of most critical needs but not big enough to satisfy the expected increase in demands.

Federal administration of wartime fertilizer programs was transferred from War Production Board to the Department of Agriculture last January 11. On January 18 the Department issued Food Production Order No. 5 on distribution of chemical fertilizers, including mixed fertilizer and straight nitrogen materials, which superseded WPB Fertilizer Order M 23. Objective of the order was to obtain equitable distribution of fertilizers, based upon 1943 requirements in producing the most essential food and fiber crops. Two groups of crops are listed, group A having first priority and group B, including other crops and uses for which fertilizer is permitted.

Key to the 1943 program is the nitrogen supply. Through some restriction in uses and substitution of grades, it is estimated that 35,000 to 40,000 tons of nitrogen will be saved. Although the supply of domestic chemical nitrogen for fertilizer recently has been increased, the supply of organic nitrogen has shrunk. In addition, requirement for several group A crops are larger than last year. The supply of straight nitrogen material, if equitably distributed, is adequate to meet the needs for all group A crops, but may be slightly less than the full requirements for group B crops.

THE situation for mixed fertilizers can be summed up briefly. If all nitrogen and potash in mixed fertilizer is used where it will do the most good in food production, supplies should be sufficient for the full requirements of group A crops. And in no case should B crops be entirely without mixed fertilizer.

The demand for fertilizer is being felt exceptionally early this year. Fertilizer manufacture cannot supply all of the early demand immediately,

because supplies are not available to them and they lack labor and facilities for mixing and delivering so far in advance of the farm needs. The supplies available early are adequate for early crop needs. Later supplies will be available proportionately for the later crop needs. Present regulations prevent hoarding of fertilizer supplies by

requiring that deliveries be made on basis of actual crop requirements to June 30, 1943, and that no deliveries be made now for use after June 30, 1943.

WILLIAM F. WATKINS,
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Production Supplies Program Branch
Food Production Administration.*

SEEDS FOR VICTORY

JUST as military victories bank heavily upon food supplies from the United States, production of those supplies in turn depends to a great degree upon the quantities of seed available to farmers back of the battle lines. At this spring season, with American agriculture girding for the greatest food production effort in history, interest in the seed supply prospects of the Nation is keener than usual.

Before the war, this country and others of the United Nations customarily imported large quantities of seed. As a rule, the United States grew its own field-crop seeds, but relied upon Holland, Denmark, France, and other countries of Europe for substantial quantities of vegetable seeds. England was in much the same position, depending in peacetime upon seeds imported from Hungary, France, Germany, and other countries. Russia, on the other hand, raised many of her own seeds, until the invader overran her fertile Ukraine district.

The blaze of warfare has changed these conditions drastically. Now the United States produces not only most of the seeds it needs but also a large portion of the seeds required by her allies. Demands for seeds by farmers in this country have increased greatly, of course, and domestic requirements for seeds have been further heightened by necessity to build up post-war reserves for rehabilitation work.

What the total requirements for seeds for all these purposes will be in 1943 is an open question, but they are expected to be approximately 1½ bil-

lion pounds. United Nations other than the United States will have taken around 14 million pounds of vegetable seeds and about 35 million pounds of field seeds. These figures do not take into account all possible needs, however, for additional supplies will be needed as allied armies free additional territories from the heel of the aggressors.

In view of these large requirements, plus the many wartime changes in sources of seed supply, what is the outlook for seed supplies on the domestic front this year?

THE answer is fairly favorable. Fortunately, for most crops, this country will be able to ship necessary seeds abroad and still have enough to supply farmers in the United States. An important exception in field seeds is the group of small-seeded legumes. Production of these legumes last year was low, and foreign demand for some of them is unusually high. Supplies of northern-grown alfalfa seed are very short. Production of alfalfa seed in this country last year was the lowest in 10 years, because of the smaller harvested acreage and early killing frosts. Russia needs more of this seed than we can spare.

Helped out by the large carry-over from 1941, supplies of red-clover seed are ample. But supplies of alsike-clover seed are low. The 1942 crop of this seed, reduced by wet weather, was one of the smallest on record. The Canadian crop also was small.

The carry-over of 11½ million pounds of sweetclover seed from 1941

has proved a great asset. Production last year was the smallest in 8 years, and total supplies are less than in 1942. Supply and price variations probably will result in some substitution of sweetclover for alfalfa this year. As a rule, a good stand of sweetclover is easier to obtain than one of alfalfa, and sweetclover will fit into the farm program nearly as well as alfalfa.

Lespedeza seed production last year was larger than in 1941. Supplies of this seed are ample. Timothy seed likewise is in ample supply, although seed is being shipped abroad in fairly large quantities. Last year's domestic crop was about average, and Canada's was above average.

FOR vegetable seeds, the supply picture is rather bright. Supplies of nearly all vegetable seeds will be adequate for requirements. Vegetable-seed production in the United States last year reached 334 million pounds, more than a fourth larger than the year before. Last year's increased seed production was most marked for about a dozen vegetables. Broccoli seed production was 231 percent more than in 1941; rutabaga, 200 percent; chicory, 228 percent; Swiss chard, 199 percent; carrot, 118 percent; garden beet, 162 percent; cauliflower, 156 percent; endive, 159 percent; celery, 131 percent; and pole lima beans, 114 percent.

As additional foods become rationed, potatoes will become more important in the national diet, and the need for seed potatoes will increase. There is no shortage of seed potatoes, for the 1942 crop of certified seed potatoes was the largest in history. Nearly 20½ million bushels, 9 percent above the previous record of 1940, were certified in the year.

This fairly favorable over-all supply situation is not, of course, the result of accident. It is the fruit of long months of work by commercial seed producers and others, cooperating under leadership of the Department, in a concerted effort to produce record quantities of seeds. Production goals for a number of annual seeds were established last year, both for vegetable seeds and field crop seeds, and production has been encouraged through a wide variety of activities. Directly involved in the production of a number of the seeds needed, have been the Food Distribution Administration, in carrying out seed purchase programs for lend-lease, war relief agencies, the United States Army, the American Red Cross and other agencies; the Food Production Administration, in its price-support program; and through the AAA incentive and practice payments.

G. C. EDLER,

Bureau of Agricultural Economics.

THE FOOD PRODUCTION ADMINISTRATION

UNDER an Executive order of the President, Secretary Wickard last December grouped a number of the Department's agencies into two functional units, the Food Production Administration and the Food Distribution Administration. In the one were gathered the agencies principally concerned with getting production of the right quantities of the right foods, and in the other, those agencies mainly concerned with getting the right distribution of foods.

For the last decade the Nation has had selective service in crops. It now has it more than ever. The difference between 1933 and 1943 is simply a difference in emphasis. Ten years ago, in the face of tremendous surpluses and dwindling markets, it was vital to agriculture and to the Nation's economic well-being to emphasize curtailment of surplus crops like cotton, corn, wheat, rice and hogs, while building up acreage of soil-saving crops.

Today, when both this country and all the United Nations must have food to win the war, it is vital to the world that farmers in the United States produce more—much more—of milk, meat, eggs, vegetables and some other foods than ever before. Today, as in 1933, the task is to produce in accordance with needs. If this task were not performed successfully, it is not too much to say that democracy itself might perish.

TO STREAMLINE the efforts of the Department of Agriculture in assisting farmers in the production job, the Food Production Administration was established. The Administration functions through the following agencies and branches:

- Agricultural Adjustment Agency.
- Soil Conservation Service.
- Federal Crop Insurance Corporation.
- Farm Security Administration.
- Farm Credit Administration.
- Production Loan Branch.
- Production Programs Branch.
- Conservation Programs Branch.
- Production Supplies Branch.
- Farm Service and Supply Branch.

The job of meeting the 1943 goals falls naturally into three parts: (1) To boost acreage and livestock numbers so as to meet or exceed the goals for particular war crops; (2) to get the most out of every acre, every animal, every piece of equipment, every minute of labor available; (3) to hold down acreage of a few crops which are relatively less important to the war effort, or of which supplies are relatively abundant, because the country cannot afford to waste resources in any way whatsoever.

Now, how does FPA help farmers to satisfy these three requirements?

Helping farmers increase their herds and their acreage of some crops falls primarily to the Production Programs

Branch, the Production Loan Branch, the Triple-A, Federal Crop Insurance Corporation, Farm Security Administration, and Farm Credit Administration.

Production Programs Branch spearheads the work of planning agricultural production. Once this program is developed, Triple-A committeemen have the responsibility of carrying the program to the 6 million individual farmers. These committeemen help the farmers lay their goal plans for their individual farms and keep in close touch with them whenever problems or obstacles arise which threaten to impede production.

Triple-A, moreover, makes payments to farmers for raising vitally needed war crops, instead of those which are less valuable to the United Nations. In order to get Triple-A payments, farmers must plant at least 90 percent of their war goals—soybeans, rice, peanuts, and the like. In this way farmers are encouraged to produce the crops that are needed to make good on Secretary Wickard's slogan, "Food will win the war and write the peace."

A further incentive to war production is given by the Crop Insurance Corporation, through which cotton and wheat farmers are able to protect themselves against unavoidable crop loss. With assurance of some income from wheat or cotton, these farmers are placed in better position to grow war crops which may be new to them.

UNDER the new set-up, credit facilities for buying land, financing crops, for rehabilitation and the like, have been geared closely to war needs. The Production Programs Branch has the job of working out with OPA, the Food Distribution Administration, and Commodity Credit Corporation the development of ceiling prices, loan and purchase programs, and other price programs which are intended to stimulate production of war products. The

Production Loan Branch directs and supervises activities of FPA which are primarily concerned with loans to finance food production.

Farm Security and Farm Credit Administrations continue as before to provide loans to farmers who need money to purchase land, livestock, equipment, or supplies for larger and more efficient production. FSA continues to retrain and rebuild the health and abilities of under-productive farmers who need only a little financial advisory assistance to make them independent and valuable wartime producers.

The second big part of the FPA program falls into two divisions: (a) getting the most out of every acre and every animal, which is taken care of jointly by the Conservation Programs Branch, Soil Conservation Service and Triple-A; and (b), obtaining as far as possible adequate supplies of labor, equipment, and machinery, which is the job of the Production Supplies Branch, the Farm Service and Supply Branch and the Farm Security Administration, cooperating with the Agricultural Labor Administration.

Conservation Programs Branch, SCS and Triple-A work out and put into application measures which increase yields per acre and per animal. Such practices as planting on the contour, terracing, strip cropping, and the like, have the immediate effect of stepping up output per acre. They also protect the Nation against the terrible soil waste which was so characteristic of the World War No. 1 period and which culminated in the dust storms of the 1930's.

NEVER before has conservation been of so great importance as now. Last year farmers were blessed with exceptionally favorable weather. Crop yields were the highest on record. It is not reasonable, however, to hope for equally favorable weather in 1943.

Therefore, efforts are required to increase yields by other means, namely, by the extensive use of simple conservation practices which can be adopted easily by farmers throughout the land.

The Farm Security Administration sees to it that farm workers are recruited and transported to areas where they are most needed and will be used effectively. The Agricultural Labor Administration has the responsibility of developing and planning programs for mobile and permanent labor camps, which programs are then carried out by Farm Security.

PRODUCTION Supplies Programs Branch and the Farm Service and Supply Branch determine requirements and appropriate steps for obtaining farm equipment and supplies, and the Farm Service and Supply Branch has charge of rationing of all farm supplies for agricultural production.

The third big part of FPA's job, that of carrying out agriculture's conversion to war production, is undertaken mostly by Triple-A and the Production Programs Branch. The Nation already has relatively ample supplies of short staple cotton and tobacco. Production of these crops must be adjusted to meet demand, in order to provide resources for producing other vital products.

This year gives the acid test to agriculture and agricultural programs. The American people are not in a mood to accept excuses. Nothing but results is good currency today. The job of helping farmers achieve those results in agricultural output is the task of the Food Production Administration.

M. CLIFFORD TOWNSEND,

Director.

Food Production Administration.

NET FARM INCOME IN 1942

FARM income in 1942 reached a new high mark. Data available on farm income and expenditures during 1942 indicate that the net return to farm operators for their labor, capital, investment and management, and for other unpaid family labor, was about 10.2 million dollars. This total was 3.45 million above farmers' net income of 1941, and 1.4 million higher than the previous record reached in 1919.

The estimates of cash income for 1940 and 1942 are given by commodities and by States in tables 1 and 2 of

this report. These estimates take into account revisions in production, disposition, and prices that have been made in the past year, as well as more complete information that has become available on the time when farmers received their payments on commodities placed under loan and on the additional income received by farmers from the redemption of commodities under loan. These data show that the movement of the 1941 crop to market was somewhat later than indicated during the crop marketing season.

Table 2.—Cash farm income and Government payments, by States, calendar years 1941 and 1942

State	1941	1942	1942 income as a percentage of 1941
	1,000 dollars	1,000 dollars	Percent
Maine.....	58,283	86,311	148
New Hampshire.....	25,437	31,239	123
Vermont.....	49,486	63,321	128
Massachusetts.....	92,116	108,230	117
Rhode Island.....	11,103	13,300	120
Connecticut.....	65,295	75,015	115
New York.....	402,604	497,404	124
New Jersey.....	121,546	149,911	123
Pennsylvania.....	316,802	395,679	125
Ohio.....	438,580	603,704	139
Indiana.....	401,723	565,034	141
Illinois.....	740,961	991,238	134
Michigan.....	304,702	397,834	131
Wisconsin.....	443,787	583,094	131
Minnesota.....	509,357	732,828	144
Iowa.....	908,902	1,297,972	143
Missouri.....	414,039	570,399	138
North Dakota.....	234,104	330,178	141
South Dakota.....	184,256	269,244	146
Nebraska.....	309,309	465,703	160
Kansas.....	419,841	595,000	142
Delaware.....	38,765	50,318	130
Maryland.....	95,928	120,844	126
Virginia.....	160,798	214,872	134
West Virginia.....	51,485	64,614	126
North Carolina.....	301,839	461,757	153
South Carolina.....	107,924	182,225	169
Georgia.....	184,120	248,870	135
Florida.....	148,141	201,661	136
Kentucky.....	202,533	267,921	132
Tennessee.....	204,994	256,751	125
Alabama.....	155,971	201,660	129
Mississippi.....	220,679	322,857	146
Arkansas.....	246,313	320,366	130
Louisiana.....	133,726	197,691	148
Oklahoma.....	279,347	396,338	142
Texas.....	769,745	1,062,301	138
Montana.....	156,016	198,173	127
Idaho.....	131,616	178,439	136
Wyoming.....	66,757	93,183	140
Colorado.....	108,909	246,438	146
New Mexico.....	68,307	99,715	146
Arizona.....	78,630	103,080	131
Utah.....	63,406	83,242	131
Nevada.....	16,671	21,491	129
Washington.....	219,609	310,159	141
Oregon.....	155,256	213,642	138
California.....	874,154	1,167,053	134
United States.....	11,753,872	16,138,319	137

TABLE 1.—Cash farm income in the United States, by crops and by groups of livestock and livestock products, calendar years 1941-42

Commodity	1941 ¹	1942 ¹	1942 income as a percentage of 1941
CROPS			
Wheat.....	1,000 dollars 693,221	1,000 dollars 836,570	Percent 121
Rye.....	13,085	16,707	128
Rice.....	56,590	88,552	155
Buckwheat.....	1,106	1,652	149
Corn.....	349,569	480,368	137
Oats.....	84,792	111,187	131
Barley.....	61,010	91,902	151
Grain sorghums.....	15,915	18,509	116
Hay.....	81,951	115,313	141
Cotton lint.....	868,927	1,256,915	145
Cottonseed.....	179,248	201,754	113
Flaxseed.....	62,418	96,073	183
Peanuts.....	64,474	82,634	128
Soybeans.....	116,683	231,349	198
Tobacco.....	324,872	483,344	149
Oranges.....	123,969	167,010	135
Grapefruit.....	26,164	43,897	168
Lemons.....	33,761	30,747	91
Limes.....	264	420	159
Apples.....	120,903	155,531	129
Peaches.....	57,090	86,169	151
Pears.....	26,400	40,664	154
Grapes.....	63,738	85,633	134
Cherries.....	15,175	20,514	135
Apricots.....	9,852	16,007	162
Plums.....	4,327	6,341	147
Prunes.....	14,738	24,479	166
Cranberries.....	8,741	10,400	119
Strawberries.....	35,743	46,186	129
Small fruits ²	15,842	19,013	120
Figs.....	5,011	6,227	124
Olives.....	8,537	6,763	79
Avocados.....	1,657	2,136	129
Other fruits ³	4,739	6,030	127
Truck crops ⁴	485,752	645,080	133
Dry edible beans.....	65,138	83,440	128
Potatoes.....	147,772	270,542	183
Sweetpotatoes.....	20,025	29,966	150
Tree Nuts.....	33,941	38,774	114
Legume and Grass Seeds.....	40,810	58,895	144
Sugar Crops.....	92,567	130,662	141
Hops.....	13,150	14,816	112
Other ⁵	278,694	327,006	117
Total crops.....	4,718,401	6,484,207	137
LIVESTOCK AND LIVESTOCK PRODUCTS			
Cattle and calves.....	1,726,741	2,401,043	139
Hogs.....	1,304,366	2,138,880	164
Sheep and lambs.....	229,754	334,033	145
Total poultry ⁶	447,485	608,732	136
Eggs (chicken).....	657,958	978,825	149
Dairy products.....	1,896,837	2,287,276	121
Wool.....	138,195	155,207	112
Other ⁷	48,463	53,368	110
Total livestock.....	6,449,799	8,957,364	139
Total crops and livestock.....	11,168,200	15,441,571	138
Government payments ⁸	585,672	696,748	119
Grand total.....	11,753,872	16,138,319	137

¹ Preliminary.

² Includes all berries except cranberries and strawberries.

³ Includes dates, kumquats, loquats, nectarines, papayas, persimmons, pineapples, pomegranates, prickly pears, and quinces, as well as apricots, apples, avocados, cherries, figs, grapes, lemons, limes, olives, prunes, plums, and pears in noncommercial States.

⁴ Includes all vegetables except dry edible beans, potatoes, and sweetpotatoes.

⁵ Includes broomcorn, peppermint, popcorn, vegetable seeds and nursery products, and greenhouse and forest products.

⁶ Includes chickens, broilers, turkeys, ducks, and geese.

⁷ Includes honey, horses, mules, and mohair.

⁸ Includes agricultural conservation, Sugar Act, and price adjustment payments to farmers.

Economic Trends Affecting Agriculture

Year and month	Industrial production (1935-39=100) ¹	Income of industrial workers (1935-39=100) ²	Cost of living (1935-39=100) ³	Wholesale prices of all commodities ⁴	1910-14=100			Prices paid, interest, and taxes	Farm wage rates
					Prices paid by farmers for commodities used in—				
					Living	Production	Living and production		
1925.....	90	126	125	151	163	147	156	170	176
1926.....	96	131	126	146	162	146	155	168	179
1927.....	95	128	124	139	160	144	153	166	179
1928.....	99	127	123	141	160	148	155	168	179
1929.....	110	134	122	139	159	147	154	167	180
1930.....	91	110	119	126	150	141	146	160	167
1931.....	75	85	109	107	128	123	126	140	130
1932.....	58	59	98	95	108	109	108	122	96
1933.....	69	61	92	96	108	108	108	118	85
1934.....	75	76	96	109	122	123	122	128	95
1935.....	87	87	98	117	124	127	125	130	103
1936.....	103	100	99	118	123	125	124	128	111
1937.....	113	117	103	126	128	136	131	134	126
1938.....	89	91	101	115	122	125	123	127	125
1939.....	108	105	99	113	120	122	121	125	123
1940.....	123	119	100	115	121	124	122	126	126
1941.....	156	166	105	127	131	131	131	134	154
1942.....	180	232	116	144	154	149	152	152	201
1942—February.....	172	201	113	141	148	146	147	147	177
March.....	172	203	114	142	150	149	150	150	167
April.....	173	212	115	144	152	149	151	151	177
May.....	174	219	116	144	153	150	152	152	183
June.....	176	226	116	144	154	150	152	152	183
July.....	178	240	117	144	154	150	152	152	202
August.....	183	244	118	145	155	150	153	152	202
September.....	186	247	118	145	157	151	154	153	202
October.....	190	250	119	146	158	151	155	154	220
November.....	194	265	120	146	160	151	156	155	220
December.....	197	272	120	147	162	153	158	156	220
1943—January.....	200	288	121	149	163	155	160	158	223
February.....	200	288	121	149	165	157	162	160	223

Year and month	Index of prices received by farmers (August 1909-July 1941=100)								Ratio, prices received to prices paid, interest and taxes
	Grains	Cotton and cottonseed	Fruits	Truck crops	Meat animals	Dairy products	Chickens and eggs	All groups	
1925.....	157	177	172	153	141	153	163	156	92
1926.....	131	122	138	143	147	152	159	145	86
1927.....	128	128	144	121	140	155	144	139	84
1928.....	130	152	176	159	151	158	153	149	89
1929.....	120	144	141	149	156	157	162	146	87
1930.....	100	102	162	140	134	137	129	126	79
1931.....	63	63	98	117	92	108	100	87	62
1932.....	44	47	82	102	63	83	82	65	53
1933.....	62	64	74	105	60	82	75	70	59
1934.....	93	99	100	103	68	95	89	90	70
1935.....	103	101	91	125	117	108	117	108	83
1936.....	108	100	100	111	119	119	115	114	89
1937.....	126	95	122	123	132	124	111	121	90
1938.....	74	70	73	101	114	109	108	95	75
1939.....	72	73	77	105	110	104	94	92	74
1940.....	85	81	79	114	108	113	96	98	78
1941.....	96	113	92	144	144	131	122	122	91
1942.....	119	155	125	199	189	152	151	157	103
1942—February.....	121	150	98	161	173	147	135	145	99
March.....	122	151	111	136	180	144	130	146	97
April.....	120	158	118	138	190	142	131	150	99
May.....	120	159	131	152	189	143	134	152	100
June.....	116	153	148	169	191	141	137	151	99
July.....	115	155	131	200	193	144	145	151	99
August.....	115	151	126	256	200	151	156	163	107
September.....	110	156	129	191	195	156	166	163	107
October.....	117	158	134	226	200	165	173	169	110
November.....	117	160	127	238	197	171	178	169	109
December.....	124	162	131	293	196	175	183	178	114
1943—January.....	134	164	139	277	205	177	185	182	115
February.....	138	163	156	301	214	179	170	178	111

¹ Federal Reserve Board, adjusted for seasonal variation. Revised September 1941.

² Total income, adjusted for seasonal variation. Revised November 1941. ³ Bureau of Labor Statistics.

⁴ Bureau of Labor Statistics index with 1926=100, divided by its 1910-14 average of 68.5. ⁵ Revised.

NOTE.—The index numbers of industrial production and of industrial workers' income shown above are not comparable in several respects. The production index includes only mining and manufacturing; the income index also includes transportation. The production index is based on volume only, whereas the income index is affected by wage rates as well as by time worked. There is usually a time lag between changes in volume of production and workers' income, since output can be increased or decreased to some extent without much change in the number of workers.

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